

ABSTRACT OF THE DISCLOSURE

The invention relates to a method for identifying and selecting a gene required for the proliferation in vivo of a pathogenic microorganism, comprising :- using a strain of the pathogenic microorganism,- generating mutants for inactivation in the genes encoding these factors,- determining the virulence of these mutants on an experimental model of infection, and their effect on enteric colonization in an axenic mouse model, and- selecting the bacterial genes essential for resistance to serum in vitro, and essential, in the host, for dissemination in the serum. Application to the screening of compounds which inhibit the products of the genes identified, and to the inhibition in vitro of the proliferation of a pathogenic microorganism in serum.